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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/585,524	07/07/2006	Per Munk Nielsen	10578.204-US	7930

25908 7590 12/10/2010

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EXAMINER	
WILLIAMS, LELA	

ART UNIT	PAPER NUMBER
1789	

NOTIFICATION DATE	DELIVERY MODE
12/10/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Patents-US-NY@novozymes.com

Office Action Summary	Application No.	Applicant(s)	
	10/585,524	NIELSEN, PER MUNK	
	Examiner	Art Unit	
	LELA S. WILLIAMS	1789	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 November 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14,17 and 18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14,17 and 18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *11/29/2010*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 29, 2010 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3, 5, 6, 7, 11, 14, 17, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Winterbottom et al. CH Patent No. 356,659.

Winterbottom et al. discloses a method for producing a food product which comprises contacting meat with 3 to 30% lactobionic acid (pg. 2, lines 15-20 & pg. 3, line 24, pg. 4, line 16). Slaughtered poultry is submerged into the lactobionic acid containing solution, for a time of 30 minutes to 4 hrs (marinate), and allowed to freeze; the poultry is then packed and distributed to the market place (pg.1, lines 26-31 & pg. 5, lines 18-22). Winterbottom also discloses the poultry will be cooked (pg. 5, line 9), therefore becoming heated. Although Winterbottom does disclose that the flesh of the poultry "absorbs sufficient antibiotic matter to guarantee adequate

protection" (pg. 6, line 24-26), the reference does not expressly disclose the amount of lactobionic acid absorbed. However, given that the poultry is soaked for at least 30 minutes in 3-30% lactobionic acid, and the disclosure of a sufficient amount is absorbed, it is clear, absent any clear and convincing evidence to the contrary, that said sufficient amount would include 0.1-20%.

4. Claims 1, 3, 5, 6, 7, 11, 14, 17, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Winterbottom et al. U.S Patent No. 2,930,702.

Winterbottom et al. discloses a method for producing a food product which comprises contacting meat with lactobionic acid (col. 1, line 15, col.2, line 10, & col. 3, line 1). Slaughtered poultry is submerged into an antibiotic solution, containing 3 to 30% by weight of lactobionic acid (col. 3, line 34) and allowed to freeze for at least 30 minutes, after which, the poultry is then packed and distributed to the market place (col.4, lines 6-15). The poultry will be cooked (col. 3, line 70), therefore becoming heated. Although Winterbottom does disclose that the flesh of the poultry absorbs sufficient antibiotic for adequate protection." (col. 4, line 10-13), the reference does not expressly disclose the amount of lactobionic acid absorbed. However, given that the poultry is soaked for at least 30 minutes in 3-30% lactobionic acid, and the disclosure of a sufficient amount is absorbed, it is clear, absent any clear and convincing evidence to the contrary, that said sufficient amount would include 0.1-20%.

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 2, 8-10, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Winterbottom et al. CH Patent No. 356,659 or Winterbottom et al. U.S Patent No. 2,930,702 in view of Roselle et al. U. S. Pat. No. 6,773,737.

Winterbottom is applied as discussed above in paragraphs 3 and 4. Both references are silent to applying lactobionate acid to minced, fish, or emulsified meat and the product being surimi. Both are also silent to the form of lactobionate acid.

Roselle discloses a method for treating food products with a solution containing calcium lactobionate (col. 1, line 45 & col. 6, line 63). The food product can be in the form of beef, pork, chicken, and shellfish. Ground (minced) beef or turkey and fish cakes (of which surimi would be consider since it is defined as "ground meat") and fish cakes are also disclosed, as well as emulsified meat product, such as bologna, hot dogs, and sausages (col. 11, lines 3-10).

Therefore, it would have been obvious to one of ordinary skill in the art to use a solution containing calcium lactobionate in minced meat or surimi, as disclosed by Roselle, in Winterbottom, given Roselle's teaching of the solution being effective in killing microorganisms in food (col. 10, lines 21-53).

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Winterbottom et al. CH Patent No. 356,659 or Winterbottom et al. U.S Patent No. 2,930,702 in view of Halden et al. EP 0 354 262.

Winterbottom discloses treating a food product with a lactobionic acid containing solution, resulting in a meat product containing lactobionic acid. The references are silent concerning marinating the meat by tumbling, however given that Halden teaches marinating meat using tumbling procedures (pg. 2, line 26) along with it being a well known procedure in the art, it would have been obvious to one of ordinary skill to use said procedure since it is known to allow for more penetration of the desired marinade (pg. 2, line 32).

8. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Winterbottom et al. CH Patent No. 356,659 or U.S Patent No. 2,930,702 in view of Hayashabira GB Patent No. 1 325 727.

Winterbottom et al. discloses treating a food product with a lactobionic acid containing solution, resulting in a meat product containing lactobionic acid. The references are silent concerning how the lactobionic acid is produced. Hayashabira discloses producing lactobionic acid from lactose by enzymatic oxidation (pg. 1, lines 71-85). Therefore, it would have been within the ambit of one of ordinary skill to manufacture said acid enzymatic ally given it is a known formation source in the art.

Response to Arguments

9. Claims 1-14 and 17-18 are currently pending. Claims 15-16 are cancelled.

10. Applicant's arguments filed November 29, 2010 have been fully considered but they are not persuasive.

11. Applicant argues:

> As stated in Applicants' prior response, the pending claims are directed to a food product comprising between 0.1 and 20 % (weight/weight) lactobionic acid, and a

> method of producing the same. In contrast, Winterbottom does not relate to a food product comprising lactobionic acid in a specified amount; instead it relates to a food product which has been dipped into a solution comprising lactobionic in a specified amount. Thus, Winterbottom does not teach or suggest a food product comprising between 0.1 and 20% (weight/weight) lactobionic acid or a method for producing the same. (pg.4)

As stated above, it is recognized that the reference does not expressly disclose the amount of lactobionic acid absorbed in the food product. However, given that Winterbottom discloses the poultry is soaked for at least 30 minutes (col. 4, line 12) in a solution containing 3-30% lactobionic acid, and the reference disclosure of a sufficient amount of the solution is absorbed; it is clear, absent any clear and convincing evidence to the contrary, that said sufficient amount would inherently include 0.1-20%.

Applicant argues:

> Thus, while the Examiner is correct that the dilution factor according to Winterbottom can vary, it is clear that the recommended concentration of antibiotic according to Winterbottom is from 3 ppm to about 30 ppm. (pg.5).

It is noted that Winterbottom does disclose the recommended amount of antibiotic to range from 3-30ppm; however, this is a **recommended** amount. Considering the reference as a whole, it is disclosed that the solution can run as high as 10,000 ppm antibiotic (col. 3, lines 40-45). Therefore, the amount of lactobionic acid, being 1 to 3 parts by weight of the antibiotic, will have a high end amount of 3 parts by weight times 10,000ppm maximum of antibiotic or 30,000ppm (3%). Therefore, it is the examiners position, absent clear and convincing evidence to the contrary, that a sufficient amount of lactobionic acid would be absorbed.

12. Applicant argues:

> As discussed above, Winterbottom does not disclose or suggest the pending claims. For at least the reasons set forth above regarding Winterbottom alone,

neither does Winterbottom in combination with Roselle, Halden and/or Hayashabira teach or suggest the pending claims.

Applicant's argument regarding Halden (EP 0 354 262), Hayashabira (GB 1 325 727) and Roselle (US 6,773,737) have been noted, and note that while Halden (EP 0 354 262), Hayashabira (GB 1 325 727) and Roselle (US 6,773,737) do not disclose all the features of the present claimed invention, they are used as a teaching references, and therefore, it is not necessary for these secondary reference to contain all the features of the presently claimed invention, *In re Nievelt*, 482 F.2d 965, 179 USPQ 224, 226 (CCPA 1973), *In re Keller* 624 F.2d 413, 208 USPQ 871, 881 (CCPA 1981). Rather these references teaches a certain concept, marinating meat using a tumbling procedure (Halden); producing lactobionic acid from lactose by enzymatic oxidation (Hayashabira); teaching a solution of calcium lactobionate being effective in killing microorganisms in food (Roselle); and in combination with the primary reference, discloses the presently claimed invention.

Conclusion

13. All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LELA S. WILLIAMS whose telephone number is (571)270-1126. The examiner can normally be reached on Monday to Thursday from 7:30am-5pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on 571-272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LELA S. WILLIAMS
Examiner, Art Unit 1789

/L. S. W. /

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